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IN THE CLAIMS:

1.-21. (canceled)

22. (currently amended) A method for controlling an implantable medical device (IMD), the method comprising:

determining if a high frequency (HF) radiation interference signal proximate to the implantable medical device exceeds a preselected HF radiation threshold and upon said signal exceeding the threshold, storing a maximum magnitude parameter to a memory location within the IMD;

adjusting a stimulation rate provided by the implantable medical device providing that the strength of the detected HF radiation interference signal exceeds the preselected HF radiation threshold; and

implementing a maximum upper stimulation rate and a minimum lower stimulation rate, wherein the adjusted stimulation is inhibited so as not to exceed either the maximum upper stimulation rate and a minimum lower stimulation rate, wherein the adjusted stimulation rate is based at least in part upon one of a prior intrinsically-activated heart rate and an evoked-activation heart rate of a patient.

23. (Original) The method of claim 22, wherein adjusting a stimulation rate provided by the implantable medical device further comprises:

adjusting a stimulation rate in which the implantable medical device stimulates a heart.

24. (previously presented) The method of claim 23, further comprising:

ascertaining a spontaneous or stimulated heart rate of the heart prior to determining that the high frequency (HF) radiation interference signal proximate to the implantable medical device exceeded a preselected HF radiation threshold; and

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storing the spontaneous or stimulated heart rate in a memory.

25. (Original) The method of claim 24, further comprising:
determining a predetermined incremental factor as a function of the stored
spontaneous or stimulated heart rate.

26. (Original) The method of claim 25, wherein determining a predetermined
incremental factor as a function of the stored spontaneous or stimulated heart
rate further comprises:

determining a predetermined incremental factor as a percentage of the
stored spontaneous or stimulated heart rate.

27. (previously presented) The method of claim 25, wherein adjusting a
stimulation rate provided by the implantable medical device further comprises:

adding the predetermined incremental factor to the stored spontaneous or
stimulated heart rate to produce an adjusted stimulation rate provided by the
implantable medical device,

wherein the adjusted stimulation rate is based at least in part upon one of
intrinsically-activated heart rate and an evoked-activation heart rate of a patient.

28. (Original) The method of claim 27, further comprising:
maintaining stimulation of the heart at the adjusted stimulation rate until
the preselected HF radiation threshold is no longer exceeded.

29. (currently amended) An implantable medical device, comprising:
a detector for detecting the presence of a high frequency (HF) radiation
interference signal;

~~memory means coupled to said detector for storing the maximum
amplitude of the HF radiation interference signal subsequent to said interference
signal exceeding a preset threshold;~~

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a processor for adjusting a stimulation rate provided by the implantable medical device in response to determining that the strength of the detected HF radiation interference signal exceeds a preselected HF radiation threshold,

wherein the adjusted stimulation rate is based at least in part upon one of a prior intrinsically-activated heart rate and an evoked-activation heart rate of a patient; and

further comprising means for implementing a maximum upper stimulation rate and a minimum lower stimulation rate, wherein the adjusted stimulation is inhibited so as not to exceed either the maximum upper stimulation rate and a minimum lower stimulation rate.

30. (Original) The device of claim 29, wherein the processor is further adapted to adjust a stimulation rate in which the implantable medical device stimulates a heart.

31. (Original) The device of claim 30, wherein the processor is further adapted to ascertain a spontaneous or stimulated heart rate of the heart and store the spontaneous or stimulated heart rate in a memory.

32. (Original) The device of claim 31, wherein the processor is further adapted to determine a predetermined incremental factor as a function of the stored spontaneous or stimulated heart rate.

33. (Original) The device of claim 32, wherein the processor is further adapted to determine the predetermined incremental factor as a percentage of the stored spontaneous or stimulated heart rate.

34. (Original) The device of claim 32, wherein the processor is further adapted to add the predetermined incremental factor to the stored spontaneous or

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stimulated heart rate to produce the adjusted stimulation rate provided by the implantable medical device.

35. (Original) The device of claim 34, wherein the processor is further adapted to maintain stimulation of the heart at the adjusted stimulation rate until the preselected HF radiation threshold is no longer exceeded.

36. (Original) The device of claim 29, wherein the implantable medical device is a pacemaker.

37. (previously presented) The device of claim 29, wherein said detector is adapted to detect the HF radiation interference signal produced by at least one of a radar and a high power radio transmitter.

38. (Original) The device of claim 33, wherein the percentage of the stored spontaneous or stimulated heart rate comprises ten percent of the stored spontaneous or stimulated heart rate.

39. (Original) The device of claim 31, wherein the adjusted stimulation rate is a function of the spontaneous or stimulated heart rate.

40.-41. (canceled)